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| APPLICATION NO.                           | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|---|-----------------|----------------------|---------------------------|------------------|
| 10/518,819                                | 12/20/2004      | Lanna Li             | 133087.06901(100682-1PUS) | 9884             |
| 52286<br>Pepper Hamilto                   | 7590 12/12/2007 |                      | EXAM                      | INER             |
| 400 Berwyn Pa                             | rk              |                      | KOSACK, JOSEPH R          |                  |
| 899 Cassatt Road<br>Berwyn, PA 19312-1183 |                 |                      | ART UNIT                  | PAPER NUMBER     |
|   |                 |                      | 1626                      |                  |
|   |                 |                      |                           |                  |
|   |                 |                      | MAIL DATE                 | DELIVERY MODE    |
|   |                 |                      | 12/12/2007                | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| •  |   |   |  |  |  |
|--|---|---|--|--|--|
|  | Application No.   | Applicant(s)  |  |  |  |
|  | 10/518,819  | LI, LANNA   |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |
|  | Joseph Kosack   | 1626  |  |  |  |
| The MAILING DATE of this communication a Period for Reply  | ppears on the cover sheet w   | rith the correspondence address   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions are to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO ute. cause the application to become A | ICATION reply be timely filed  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133). |  |  |  |
| Status   |   |   |  |  |  |
| 1) Responsive to communication(s) filed on 21  | September 2007.   |   |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ Th   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |  |  |  |
| closed in accordance with the practice under   | r Ex parte Quayle, 1935 C.  | D. 11, 453 O.G. 213.  |  |  |  |
| Disposition of Claims  |   |   |  |  |  |
| 4)  Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-3,13 and 14 is/are rejected.  7)  Claim(s) 4-12 is/are objected to.  8)  Claim(s) are subject to restriction and  | rawn from consideration.  |   |  |  |  |
| Application Papers   |   |   |  |  |  |
| 9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the corr 11) The oath or declaration is objected to by the  | ccepted or b) objected to<br>the drawing(s) be held in abeya<br>ection is required if the drawin  | ance. See 37 CFR 1.85(a).<br>g(s) is objected to. See 37 CFR 1.121(d).  |  |  |  |
| Priority under 35 U.S.C. § 119   |   | · .   |  |  |  |
| 12) Acknowledgment is made of a claim for forei  a) All b) Some * c) None of:  1 Certified copies of the priority docume  2 Certified copies of the priority docume  3 Copies of the certified copies of the p  application from the International Bure  * See the attached detailed Office action for a l   | ents have been received.<br>ents have been received in<br>riority documents have bee<br>eau (PCT Rule 17.2(a)).                           | Application No n received in this National Stage  |  |  |  |
|  |   |   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 11/9/05   | Paper No  | Summary (PTO-413) p(s)/Mail Date Informal Patent Application  |  |  |  |

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#### **DETAILED ACTION**

Claims 1-14 are pending in the instant application.

### Election/Restrictions

Applicant's election with traverse of Group I (claims 1-14 in part) in the reply filed on September 21, 2007 is acknowledged. The traversal is on the ground(s) that search burden has not been shown. This is not found persuasive because search burden is not a consideration for a lack of unity requirement under 35 U.S.C. 372.

The requirement is still deemed proper and is therefore made FINAL. Claims 1-14 (in part) are withdrawn from further consideration by the Examiner under 37 CFR 1.142(b) as being drawn to a non-elected invention.

## **Priority**

The claim to priority as a 371 filing of PCT/GB03/02598 filed June 17, 2003, which claims priority to SE 02021937-0 June 20, 2002 is acknowledged in the instant application.

## Information Disclosure Statement

The Information Disclosure Statement filed on November 09, 2005 has been considered fully by the Examiner.

# Claim Objections

Claims 4-8 and 10-12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot refer to another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

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Claims 1-3, 9, and 13-14 are objected to for containing elected and non-elected subject matter. The elected subject matter has been identified supra.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 1-3 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamaru et al. (USPN 5,922,767) in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).

The instant claims are drawn to a compound of the formula

$$R^{1}$$
— $(CH_{2})_{m}$ — $T$ — $(CH_{2})_{n}$ — $U$ — $(CH_{2})_{q}$ — $V$ — $(CH_{2})_{q}$ — $V$ — $(CH_{2})_{q}$ — $V$ — $(R^{3})_{s}$  where  $W$ 

is a direct bond, q is 1, V is O, and all other substituents are as defined.

Kanamaru.et al. teach a compound of the formula

$$\begin{array}{c} \text{MeO} \\ \text{CH}_2 - \text{NH} - \text{C} - \text{NH} \\ \text{O} \\ \text{i-Pr} \end{array}$$

See compound 34, columns

29-30.

Kanamaru et al. do not teach a linker of CH2NHC(O)CH2 in place of the CH2NHC(O)NH linker, the protected form of the compound, or the process to deprotect the carboxylic acid.

Patani et al. teach the bioisosteric replacement of CH2 for NH in a divalent linker. See pages 3155-3156, Especially Tables 19 and 20 and Figures 23 and 24. Protecting groups for carboxylic acids and methods for protecting and deprotecting carboxylic acids are commonly known throughout the chemical arts. The motivation to make the change along with the reasonable expectation of success are provided by Patani et al.

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which teaches that bioisosterism represents one approach for the medicinal chemist to rationally modify lead compounds into safer and more clinically effective agents. See page 3147.

#### Conclusion

Claims 1-3 and 13-14 are rejected. Claims 1-14 are objected to.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Kosack whose telephone number is (571)-272-5575. The examiner can normally be reached on M-F 6:30 A.M. until 4:00 P.M. The examiner has every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph M<sup>c</sup>Kane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph Kosack Patent Examiner Art Unit 1626

Joseph K. M<sup>c</sup>Kane

FRANKLAN EXAMINER

Supervisory Patent Examiner

Art Unit 1626